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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/987,902

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Hirosato Yagi

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08/10/2006

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WASHINGTON, DC 20036

EXAMINER

BORISSOV, IGOR N

ART UNIT

PAPER NUMBER

3639

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,902

Applicant(s)

YAGI ET AL.

Examiner

Igor Borissov

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119


- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.


IGOR N. BORISSOV
PRIMARY EXAMINER

DETAILED ACTION***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/21/2006 has been entered.

Response to Amendment

Amendment received on 7/21/2006 is acknowledged and entered. Claims 1, 5, 7 and 12 have been amended. Claims 1-15 are currently pending in the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss (US 6,681,156) in view of Tanner, Jr. et al. (US 6,636,784) and further in view of Fesmire et al. (US 6,067,483).

Weiss teaches a method for planning energy supply for energy consumers, comprising:

Claim 1, Receiving power at a receiving and distributing energy management facility, said power is purchased by the energy management facility based on a purchase contract with an electric power company in consideration of the total amount of power needed by users (C. 7, L. 59-64; C. 8, L. 5-26);

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determining maximum amount of power needed (C. 14, L. 48-53); and distributing said power to users (C. 8, L. 29-30).

Weiss does not specifically teach that said energy is received at high voltage, and distributed at a low voltage. Weiss, also, does not specifically teach setting an adjusting limiter to said determined contract current for each of the users.

Tanner, Jr. et al. (Tanner) teaches a method for re-delivering the contracted power, comprising:

receiving high (transmission) voltage power at the electricity transfer station (20) (Fig. 1; C. 3, L. 56-57);

determining a contracted current for each of the users depending on the maximum current capacity (C. 4, L. 58-67); and

distributing nominal (distribution) voltage power from said electricity transfer station to each of the users (C. 3, L. 58-59),

wherein said electricity transfer station includes step down transformers (C. 4, L. 6-7), thereby indicating distributing power at a low voltage.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weiss to include that said energy is received at high voltage, as disclosed in Tanner, because it would advantageously allow to avoid losses of power during the transmission. And it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weiss and Tanner to include utilizing step-down transformers for distributing a low voltage power to consumers, as disclosed in Tanner, because it would advantageously allow said consumers to utilize said power for household appliances. Furthermore, the examiner notes that the applicant admitted that it is well known to transmit power for industry at high voltage, and distribute said power to household at low voltage (Page 1 of Specification, Background of the Invention, lines 17-20).

Fesmire et al. (Fesmire) teaches a method for delivering power to a plurality of the electrical circuits having circuit breakers which are controlled by a computer (C. 3, L. 26 – C. 4, L. 25).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weiss and Tanner to include setting an adjusting limiter to said determined contract current for each of the users, as disclosed in Fesmire, because it would advantageously allow to implement a pre-programmed energy conservation schedule (Tanner; C. 3, L. 26-31).

Furthermore, Tanner teaches:

Claim 2. Allocating an excessive current capacity, which is not necessary for one user to another user who needs the excessive current capacity (C. 3, L. 37-41).

Claim 3. Requesting necessary current capacity, allocating current capacity based on the request, and distributing the contracted current to the users (C. 4, L. 58-67).

Claim 4. Charging a penalty when a current used exceeds the contracted current allocated to each of the users (C. 1, L. 27-29).

Claim 7, Weiss teaches a system for planning energy supply for energy consumers, comprising:

an energy management facility, a server and the Internet, wherein said system is adapted to:

receive power at the receiving and distributing energy management facility, said power is purchased by the energy management facility based on a purchase contract with an electric power company in consideration of the total amount of power needed by users (C. 7, L. 59-64; C. 8, L. 5-26);

determine maximum amount of power needed (C. 14, L. 48-53); and
distribute said power to users (C. 8, L. 29-30).

Weiss does not specifically teach that said energy is received at high voltage, and distributed at a low voltage. Weiss, also, does not specifically teach setting an adjusting limiter to said determined contract current for each of the users.

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Tanner, Jr. et al. (Tanner) teaches a system for re-delivering the contracted power, said system comprising an electricity transfer station, a controller and a transmission network, wherein said system is adapted to:

receive high (transmission) voltage power at the electricity transfer station (20) (Fig. 1; C. 3, L. 56-57);

determine a contracted current for each of the users depending on the maximum current capacity (C. 4, L. 58-67); and

distribute nominal (distribution) voltage power from said electricity transfer station to each of the users (C. 3, L. 58-59), and

wherein said electricity transfer station includes step down transformers (C. 4, L. 6-7), thereby indicating distributing power at a low voltage.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weiss to include that said system is adapted to receive said energy at high voltage, as disclosed in Tanner, because it would advantageously allow to avoid losses of power during the transmission. And it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weiss and Tanner to include that said system includes a step-down transformers for distributing a low voltage power to consumers, as disclosed in Tanner, because it would advantageously allow said consumers to utilize said power for household appliances.

Furthermore, the examiner notes that the applicant admitted that it is well known to transmit power for industry at high voltage, and distribute said power to household at low voltage (Page 1 of Specification, Background of the Invention, lines 17-20).

Fesmire teaches a method for delivering power to a plurality of the electrical circuits having circuit breakers which are controlled by a computer (C. 3, L. 26 – C. 4, L. 25).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weiss and Tanner to include setting an adjusting limiter to said determined contract current for each of the users, as disclosed in Fesmire, because it would advantageously allow to implement a pre-programmed energy conservation schedule (Tanner; C. 3, L. 26-31).

Claim 8. Tanner teaches said system, wherein a control device for controlling and displaying information on power consumed by each of the users is provided (Figs. 3-6; C. 4, L. 19).

Claim 9. Said system as in Claim 7, therefore see reasoning applied to Claim 7. Language as to *"wherein an excessive current capacity which is not necessary for one user is given to the server, information on another user willing to increase a contracted current is given to the server, and the excessive current capacity is allocated to the another user on the basis of the information"* indicates an intended use of the system and does not recite a structural limitation. Therefore, said language is given no patentable weight. MPEP 2106 (II) (C) states: *"Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation."*

Claim 10. Said system as in Claim 7, therefore see reasoning applied to Claim 7. Language as to *"wherein information on a maximum current capacity required by each of the users is given to the server, the server determines the contracted current of each of the users on the basis of the information and distributes the power to each of the users"* indicates an intended use of the system and does not recite a structural limitation. Therefore, said language is given no patentable weight. MPEP 2106 (II) (C) states: *"Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation."*

Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss (US 6,681,156) in view of Tanner, Jr. et al. (US 6,636,784).

Claim 12. Weiss teaches a system for planning energy supply for energy consumers, comprising:

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an energy management facility, a server and the Internet, wherein said system is adapted to:

receive power at the receiving and distributing energy management facility, said power is purchased by the energy management facility based on a purchase contract with an electric power company in consideration of the total amount of power needed by users (C. 7, L. 59-64; C. 8, L. 5-26);

determine maximum amount of power needed (C. 14, L. 48-53); and
distribute said power to users (C. 8, L. 29-30); and

control and display information on power consumed by the users (C. 14, L. 56-61).

Weiss does not specifically teach that said energy is received at high voltage, and distributed at a low voltage. Also, Weiss does not specifically teach a current limiter to be controlled by said server.

Tanner teaches a system for re-delivering the contracted power, said system comprising an electricity transfer station, a controller and a transmission network, wherein said system is adapted to:

receive high (transmission) voltage power at the electricity transfer station (20) (Fig. 1; C. 3, L. 56-57);

determine a contracted current for each of the users depending on the maximum current capacity (C. 4, L. 58-67); and

distribute nominal (distribution) voltage power from said electricity transfer station to each of the users (C. 3, L. 58-59);

controlling and displaying information on power consumed by each of the users is provided (Figs. 3-6; C. 4, L. 19);

wherein said electricity transfer station includes step down transformers (C. 4, L. 6-7), thereby indicating distributing power at a low voltage.

Furthermore, Tanner teaches a circuit re-closer and switches (current limiter), which is controlled on the basis of determining a contracted current for each of the users depending on the maximum current capacity, and distributing power to each of the users (C. 8, L. 4-12).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weiss to include that said system is adapted to receive said energy at high voltage, as disclosed in Tanner, because it would advantageously allow to avoid losses of power during the transmission. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weiss and Tanner to include that said system includes a step-down transformers for distributing a low voltage power to consumers, as disclosed in Tanner, because it would advantageously allow said consumers to utilize said power for household appliances. And it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weiss and Tanner to include a circuit re-closer and switches (current limiter), which is controlled on the basis of determining a contracted current for each of the users depending on the maximum current capacity, and distributing power to each of the users, as disclosed in Tanner, because it would advantageously allow to prevent overspending of contracted power, thereby enhancing the reliability of the delivery of the contracted power to the customers.

Furthermore, the examiner notes that the applicant admitted that it is well known to transmit power for industry at high voltage, and distribute said power to household at low voltage (Page 1 of Specification, Background of the Invention, lines 17-20).

Claim 13. Said system as in Claim 12, therefore see reasoning applied to Claim 12. Language as to *"wherein an excessive current capacity which is not necessary for one user is given to the server, information on another user willing to increase a contracted current is given to the server, and the excessive current capacity is allocated to the another user on the basis of the information"* recite an intended use of the system and does not recite a structural limitation. Therefore, said language is given no patentable weight. MPEP 2106 (II) (C) states: *"Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation."*

Claim 14. Weiss teaches said system, adapted to determine maximum amount

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of power needed (C. 14, L. 48-53); and distribute said power to users (C. 8, L. 29-30).

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss in view of Tanner, Jr. et al. and further in view of Mistr, Jr. (US 5,794,212).

Weiss teaches a method for planning energy supply for energy consumers, comprising:

Claims 5. Receiving power which is purchased by a management company based on a purchase contract with an electric power company in consideration of the total amount of power needed by users (C. 7, L. 59-64; C. 8, L. 5-26);

determining maximum amount of power needed (C. 14, L. 48-53); and distributing said power to users (C. 8, L. 29-30).

Weiss does not specifically teach that said energy is received at high voltage, and distributed at a low voltage. Also, Weiss does not specifically teach auctioning for additional power.

Tanner teaches a method and system for re-delivering the contracted power, comprising:

Receiving high (transmission) voltage power at the electricity transfer station (20) (Fig. 1; C. 3, L. 56-57);

determining a contracted current for each of the users depending on the maximum current capacity (C. 4, L. 58-67); and

distributing nominal (distribution) voltage power from said electricity transfer station to each of the users (C. 3, L. 58-59),

wherein said electricity transfer station includes step down transformers (C. 4, L. 6-7).

Mistr, Jr. (Mistr) teaches a method and system for efficient purchasing of energy, wherein a potential user requests bids from those able to free up the needed capacity (C. 4, L. 29-36).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weiss to include that said energy is received at high voltage, as disclosed in Tanner, because it would advantageously allow to avoid losses of power during the transmission. And it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weiss and Tanner to include utilizing step-down transformers for distributing a low voltage power to consumers, as disclosed in Tanner, because it would advantageously allow said consumers to utilize said power for household appliances.

Furthermore, the examiner notes that the applicant admitted that it is well known to transmit power for industry at high voltage, and distribute said power to household at low voltage (Page 1 of Specification, Background of the Invention, lines 17-20).

And it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weiss and Tanner to include auctioning for additional power, as disclosed in Mistr, because it would advantageously allow a buyer to obtain the needed capacity at the best available price.

Claim 6. Tanner teaches charging a penalty when a used current exceeds the contracted current allocated to each of the users (C. 1, L. 27-29). The motivation to combine references would be to collect funds needed to operate the business.

Claim 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss in view of Tanner, Jr. et al. further in view of Fesmire et al. and further in view of Mistr, Jr.

Claims 11. Weiss in view of Tanner and further in view of Fesmire teaches all the limitations of Claim 11 except specifically teaching auctioning for additional power.

Mistr teaches a method and system for efficient purchasing of energy, wherein a potential user requests bids from those able to free up the needed capacity (C. 4, L. 29-36).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weiss, Tanner and Fesmire to include auctioning for additional power, as disclosed in Mistr, because it would advantageously allow a buyer to obtain the needed capacity at the best available price.

Claims 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss in view of Tanner, Jr. et al. and further in view of Mistr, Jr.

Claim 15. Weiss in view of Tanner teaches all the limitations of Claim 15, except specifically teaching auctioning for additional power.

Mistr teaches a method and system for efficient purchasing of energy, wherein a potential user requests bids from those able to free up the needed capacity (C. 4, L. 29-36).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Weiss and Tanner to include auctioning for additional power, as disclosed in Mistr, because it would advantageously allow a buyer to obtain the needed capacity at the best available price.

Response to Arguments

Applicant's arguments filed 7/21/2006 have been fully considered but they are not persuasive.

In response to the applicant's argument that Tanner fails to disclose "grasping a maximum current capacity necessary for each of the users", it is noted that Weiss was applied for this feature (See (C. 14, L. 48-53 and a discussion above).

In response to the applicant's argument that Tanner fails to disclose: "determining a contracted current for each of the users depending on the maximum current capacity", it is noted that Tanner does, in fact, disclose that feature. Specifically, Tanner teaches: "...the maximum electricity flow determined by the electricity consumer

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may be based on the contractual limitations of the electricity customer's substation" (C. 4, L. 58-67). As per "distributing power to each of the users", Tanner also teaches said feature (C. 3, L. 58-59).

In response to the applicant's argument that Tanner fails to disclose "allocating an excessive current capacity which is not necessary for one user to another user who needs the excessive current capacity", the examiner points out that Tanner explicitly discloses said feature. Specifically, Tanner teaches: "...a method allows electricity to be secured by a customer ... under an existing electricity supply contract and re-delivered by that customer to another party under a non-interruptible supply contract without risk of increasing the customer's peak demand above a desired value (C. 3, L. 37-41), wherein said desired value is a maximum electricity flow determined by the electricity consumer and is based on the contractual limitations of the electricity customer's substation" (C. 4, L. 58-67).

In response to applicant's argument that the prior art does not teach "grasping maximum current capacity", but teaches "maximum power capacity", and that "power is not the same as current" it is noted that at the given conditions with the voltage being substantially constant value power is proportional to current. Therefore, for the power distribution lines having voltage substantially constant, it would have been obvious to one having ordinary skill in the art to operate with either value for estimating maximum energy demand for the area.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see form PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-

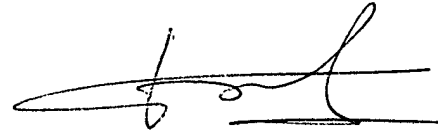
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6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IB

8/03/2006



IGOR N. BORISSOV
PRIMARY EXAMINER